

II. AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) A combination of ~~a foaming agent and a molten metal~~ used for manufacturing a foamed or porous metal, the combination comprising:
a mixture of foaming agent including a foamable powder; and
a coating layer of SiO_2 SiO_2 covering the particle surfaces of the powder; and
a molten metal.

Claim 2. (Previously Presented) The combination according to claim 1, wherein the powder is of a carbonate.

Claim 3. (Currently Amended) The combination according to claim 2 ~~claim 4~~, wherein the carbonate is CaCO_3 or MgCO_3 .

Claim 4. (Currently Amended) The combination according to claim 2 ~~claim 4~~, wherein the carbonate is MgCO_3 .

Claim 5. (Previously Presented) The combination according to claim 1, wherein the molten metal is molten aluminum.

Claim 6. (Currently Amended) A method of foaming agent used for manufacturing a foamed or porous metal, the method comprising:

preparing a foamable powder of MgCO_3 ; and having a coating layer of SiO_2 SiO_2 covering the particle surfaces of the foamable powder;
adding the foamable powder as a foaming agent into a molten metal, wherein heat from the molten metal gasifies the foamable powder; and
cooling the molten metal to yield the foamed or porous metal, wherein the foamed or porous metal includes a plurality of pores formed from gasification of the particles of the foamable powder.

Claim 7. (New) The method according to claim 6, wherein the powder is of a carbonate.

Claim 8. (New) The method according to claim 7, wherein the carbonate is CaCO_3 or MgCO_3 .

Claim 9. (New) The method according to claim 7, wherein the carbonate is MgCO_3 .

Claim 10. (New) The method according to claim 6, wherein the molten metal is molten aluminum.

Claim 11. (New) A method of manufacturing a foamed or porous metal, the method comprising:

- preparing an aqueous solution of Na_2SiO_3 ;
- adding a mixture of a strong acid and a metal carbonate;
- stirring the resulting solution to form solid SiO_2 ; and
- separating the foaming agent.

Claim 12. (New) The method of claim 11, wherein the strong acid is HCl.

Claim 13. (New) The method of claim 11, wherein the metal carbonate is CaCO_3 .

Claim 14. (New) The method of claim 11, wherein the metal carbonate is MgCO_3 .

Claim 15. (New) The method of claim 11, further comprising heating the aqueous solution of Na_2SiO_3 .

Claim 16. (New) The method of claim 11, wherein the foaming agent is separated by:
filtering the resulting solution after the reaction is complete; and
drying the foaming agent.

Claim 17. (New) The method of claim 11, wherein the foaming agent is separated by:
heating the resulting solution to evaporate water.